Standard: K.CC.B.5. *Count to answer "how many" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1 to 20, count out that many objects.*

Mathematical Practice or Process Standards:

SFMP 4. Model with mathematics. Student uses a variety of concrete objects to show a given count.

SFMP 6. Attend to precision. Students will use correct number names and written numerals to accurately sequence numbers as they count out the number of items in the set.

Goal:

As students show proficiency with rote counting, for example, from 1 to 10, they can begin to find the number of objects in a set within that range (cardinality). It is important for students to connect the physical objects, with the number word and the numeral. Students should begin with counting physical objects, progress to pictures, and then connect the numeral to the physical representations.

Planning:

Materials: Counters including chips, buttons, shells, and the like; five and ten frames; numeral cards.

Sample Activity:

- Model counting the number of objects in a set of 3 chips. Count orally as you move the items.
- Provide each table with a collection of items to count (less than 6 to start). Let students take turns counting items.
- As students show accuracy with counting, increase the number of objects.
- Have students match the numeral card with the correct count.
- Students who can write numerals can label each collection by writing the numeral.

Questions/Prompts:

Show me 10 counters.

How can you prove there are 10?

Match the numeral for 10 with the items you counted.

If a student double counts an item, prompt him to say one number with each item he moves.

Write the number to show how many you have counted.

Differentiating Instruction:

Struggling Students: Begin with numbers less than 6. Have students move objects as they count. Be sure they are moving one item with each number. Next, have students point to each item as they count. Do not have students write numerals until they can count accurately.

Extension: Give the students the number and ask them to show that many items and, later, draw that many items. Let students model numbers with ten frames and double ten frames explaining different strategies to know the number. For example, I know there are 15 because 5 spots are empty.